5

## ABSTRACT OF THE DISCLOSURE

A microsystem for determining clotting time of blood and a low-cost, single-use device for use therein are provided wherein the device has no moving parts or expensive optical sensors or magnets. The device includes a microfluidic channel and a microsensor at least partially in fluid communication with the channel. By analyzing changes in the sensor as a drop of blood flows down the microfluidic channel, the time at which the blood clots can be determined.